

# IL-22 Monoclonal Antibody (1H8PWSR), PerCP-eFluor 710, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG1, kappa
Recommended Isotype Control	Rat IgG1 kappa Isotype Control (eBRG1), PerCP-eFluor 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	1H8PWSR
Conjugate	PerCP-eFluor™ 710
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_10598646

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.125 µg/test	7 Publications

## Product Specific Information

**Description:** The 1H8PWSR monoclonal antibody reacts with mouse interleukin(IL)-22. IL-22 is a 20 kDa member of the IL-10 cytokine family that is secreted primarily by Th17, NK cells, and some other T cells. In in vitro Th17 cultures, induction of IL-22 expression is greater in response to IL-23 than IL-6 or TGF- $\beta$ , suggesting that this cytokine may be secreted by more fully differentiated Th17 cells in vivo. A heterodimer consisting of IL-10R2 and IL-22R1 serves as the receptor for IL-22. Th17-secreted IL-22 binds to the IL-22 receptor complex on target cells to induce the expression of anti-microbial peptides -defensin-2 and -defensin-3. Recently, it was demonstrated that IL-22 is able to protect hosts against bacterial infections of the lungs and gut.

**Applications Reported:** This 1H8PWSR antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

This clone has been optimized for use with eBioscience IC Fixation and Permeabilization kit (cat. 88-8823).

**Applications Tested:** This 1H8PWSR antibody has been tested on Th17-polarized mouse splenocytes restimulated with PMA, Ionomycin and Brefeldin A for 5 hours. This can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

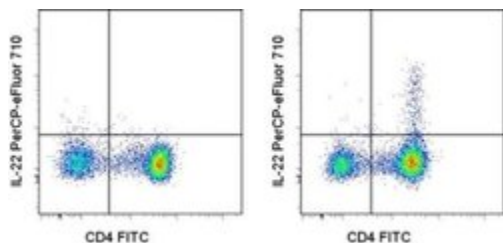
PerCP-eFluor® 710 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.

Our testing indicates that PerCP-eFluor® 710 conjugated antibodies are stable when stained samples are exposed to freshly prepared 2% formaldehyde overnight at 4°C, but please evaluate for alternative fixation protocols.

Excitation: 488 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

## Product Images For IL-22 Monoclonal Antibody (1H8PWSR), PerCP-eFluor 710, eBioscience™



### IL-22 Antibody (46-7221-82) in Flow

Intracellular staining of 10-day Th17-polarized mouse splenocytes treated with Brefeldin A (Product # 00-4506-51) (left) or restimulated with PMA/Ionomycin in the presence of Brefeldin A for 5 hours (right) with Anti-Mouse CD4 FITC (Product # 11-0042-82) and 0.06 µg of Anti-Mouse IL-22 PerCP-eFluor® 710. Cells in the lymphocyte gate were used for analysis.

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## 7 References

### Flow Cytometry (7)

#### Nature communications

#### Intestinal microbiota-derived short-chain fatty acids regulation of immune cell IL-22 production and gut immunity.

"Published figure using IL-22 monoclonal antibody (Product # 46-7221-82) in Flow Cytometry"

Authors: Yang W, Yu T, Huang X, Bilotta AJ, Xu L, Lu Y, Sun J, Pan F, Zhou J, Zhang W, Yao S, Maynard CL, Singh N, Dann SM, Liu Z, Cong Y

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2020

#### JCI insight

#### Host immunology and rational immunotherapy for carbapenem-resistant *Klebsiella pneumoniae* infection.

"46-7221 was used in Flow cytometry/Cell sorting to support the development of host-directed immunotherapy as an adjunct treatment to new antibiotics."

Authors: Iwanaga N, Sandquist I, Wanek A, McCombs J, Song K, Kolls JK

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2020

[View more Flow references on thermofisher.com](#)

## More applications with references on thermofisher.com

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